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A Cognitive Linguistic Study of Visually Shaping Abstract Words

A B S T R A C T

The current study qualitatively addresses concept as the main theoretical problem in cognitive linguistics on the one hand, and the abstract nature of things on the other. In this regard, scholars maintained that the issue with concept is still controversial. Besides, to deal with abstract nouns is also difficult, let alone when dealing with the concept of abstract noun. Of course the problem will be doubled as the nature of both concepts and abstract nouns is invisible, perspectivised, and changeable. Accordingly, the objective of the present work is to examine the semantic range of the abstract word BLACKMAILING from the perspectives of a number of talented participants in drawing. That is, the researchers are to address the following research question: What is the semantic range of the selected abstract word (blackmailing) from the participants' perspectives who are talented in drawing? The researchers adopted Fillmore's (1976/77/82) theory of Frame Semantics. As for the data, one abstract word (blackmailing) has been selected based on the juror's opinion to be applied on a number of six college students, who are talented in drawing. The study has concluded that: there is no fixed referential connection between an abstract word and its concept; the participants anchored their understanding of abstract nouns in pictures that represent minimized scenes or events of reality using concrete referents and associations. Moreover, one might encounter a similarity in terms of using some the frame elements; however, their employment is different. Finally, the semantic range of BLACKMAILING is between four to 10 elements.

دراسة لغوية معرفية / إدراكية عن التشكيل البصري للكلمات المجردة

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المستخلص

تتناول الدراسة الحالية النوعية المفهوم باعتباره المشكلة النظرية الرئيسة في اللغويات المعرفية من جهة، والطبيعة المجردة للأشياء من جهة أخرى. وفي هذا الصدد، أكد الباحثون أن قضية المفهوم لا تزال مثيرة للجدل. علاوة على ذلك، فإن التعامل مع الأسماء المجردة أمر صعب أيضًا، ناهيك عن التعامل مع مفهوم الاسم المجرد. بالطبع ستتضاعف المشكلة لأن طبيعة كل من المفاهيم والأسماء المجردة غير مرئية ومتغيرة. وعليه، يهدف العمل الحالي لدراسة النطاق الدلالي للكلمة المجردة BLACKMAILING (الابتزاز) من وجهات نظر عدد من الرسامات. وستقوم الباحثتان بالإجابة عن السؤال البحث الآتي: ما هو النطاق الدلالي للكلمة المجردة المختارة (blackmailing) من وجهات نظر الرسامات؟ تبنت الباحثتان نظرية فيلمور (٨٢/٧٧/١٩٧٦) " دلالات الإطار". أما فيما يتعلق بالبيانات، فقد تم اختيار كلمة مجردة واحدة (الابتزاز) بناءً على رأي المحكمين لتطبيقها على عدد من ستة طالبات جامعيات موهوبات في الرسم. توصلت الدراسة إلى أنه: لا يوجد ارتباط مرجعي ثابت بين الكلمة المجردة ومفهومها؛ حيث رسخت الرسامات فهمهن للأسماء المجردة في صور تمثل مشاهد أو أحداثًا مصغرة من الواقع باستخدام مراجع وارتباطات ملموسة. علاوة على ذلك، قد يواجه المرء تشابهًا من حيث استخدام بعض عناصر الإطار؛ ومع ذلك، فإن استخدامها مختلف. أخيرًا، يتراوح النطاق الدلالي لكلمة ابتزاز بين أربعة إلى عشرة عناصر.

الكلمات المفتاحية: الكلمات المجردة، الابتزاز، علم اللغة المعرفي، المفهوم، دلالة الاطار، البصريات، التفكير البصري

1. Introduction

The present work addresses the area of conceptual meaning in cognitive linguistics, and in particular that of abstract nouns. Why abstract? The answer is of three folds: first because the first paper was about concrete nouns, and second, because Schwanenflugel and Stowe (1989) stated that abstract words are said to be difficult to comprehend due to the difficulty of retrieving prior or related knowledge about them. Third is because the relation between a word and its concept is still considered a theoretical problem in cognitive linguistics as Izatullaevna (2022) stated. More so, the problem with abstract concepts is that they represent a point of contestation among scholars. For example, Paivio (1986) maintained that abstract words "have a weak referential connection to the imagen system" (p. 128) and that they are instead referred to via verbal associations. He further added that the meaning of abstract words can be indirectly accessed by meditating "associated concrete words" (P. 8). Then, Paivio (1987, as cited in Yuille, 2014) stated that to semantically decide the meaning of abstract words, one should resort to picture advantages. In the same vein, Phifer (2008) shed light, based on the results of a number of studies, on the importance of using pictures in anchoring and referring properly to abstract words. In other words, though for some scholars abstract words have a weak connection with the imagen system; however, the imagen system plays a role in deciding their meaning. Finally, Yuille (2014) stated that the results of many

studies supported the approaches that distinguish "the conceptual meaning in terms of its relative availability to pictures and words" (p.127).

The rallying point between abstractness and conceptualization is that both of them are invisible, changeable, and individual based. Such features are the main concern of cognitive linguistics, which deals with words, sentences, and things conceptually. In this regard, Izatullaevna (2022) maintained that concepts are invisible. Thus, to access an invisible thing, one can either resort to a verbal or non-verbal mechanism. That is, to deal with the concept of abstract words magnifies the difficulty because abstract words are said to be difficult and concepts are controversial. Qasim and Al-Bahrani (2024) in a study under publication shed light on Lixachev idea (as cited in Shodiya, 2023) in that the term concept in cognitive linguistics is by itself controversial; many things still need to be known about it in terms of its "definition, nature, essence, characteristics, and structure".

Away from this philosophical problem, most of the studies conducted on abstract words and concepts were tackled from different angles. For example, they shed light on the dimensions that determine the meaning of abstract words, the semantic and contextual criteria, the concept of abstract nouns, the difference between abstract and concrete nouns, or they were conducted on children and adults, etc. To the best of the researchers' knowledge no study has been conducted on abstract words where its subjects were participants talented in drawing. This is because from the researchers' of the present work perspectives, such talented people have creative minds; they could see and portrait things easily from their own perspectives. Their drawings depict by no means either the details of the reality in general or the reality that only concerns them. This accentuates what Bled et.al (2021) highlighted, the pictorial thinking is challenging because it is susceptible to contextual and cultural variations. In addition, Dickson, Thompson, and O'Toole (2016) added that studies that involve asking the participants to draw help to reflect the participants' key features and sub-micro particles of both context and culture.

As for the importance of the study, Haiman (1985) stated that cognitive linguistics is mainly concerned with examining concepts and researching the way they are developed and motivated. Geeraferts and Cuyckens (2007, p. 5, as cited in Jabbar and Fahid, 2018) added that cognitive linguistics deals with the cognitive functions and abilities, that is, the "intermediate information structures in world". Tohirovich (2021) highly emphasized conducting studies on concepts because they are of great importance. Their synergistic and invisible nature made them susceptible to human's understanding and deciphering, reflecting as a result the micro and macro cultures. Such focal areas represent the main interest of cognitive linguistics. Besides, the relation between using a specific sign and the amount of reality being reflected or highlighted is still theoretical and problematic. Qasim and Al-Bahrani (2024) cited many scholars' statements that emphasized the importance of conducting a study on the visual representations of abstract words or concepts. For instance, Cunha, Martins and Machado (2018, as cited in Qasim and Al-Bahrani, 2024) claimed that in the domain of visual representations, little attention has been given to the area of conceptual processes. Ewenstein and Whyte (2007, as cited in Qasim and Al-Bahrani (2024), further elaborated, still much more research need to be conducted on how people visualize words and objects. Moreover, Dahl, Chattopadhyay, and Gorn (2001, as cited in Qasim and Al-Bahrani

(2024) explicated that to use visualization as a mental tool to develop concept structure is still scarce and requires many efforts in this regard.

To that effect, the present work is to be conducted to bridge this gap and to know more about the way abstract words are thought of or mentally conceptualized. Accordingly, the objective of the study is to **examine the semantic range of an abstract word, BLACKMAILING, from the perspectives of a number of participants, who are talented in drawing**. That is, the researchers are to address the following research question: **What is the semantic range of the selected abstract word (blackmailing) from the participants' perspectives who are talented in drawing?**

2. Theoretical Background

2.1 The Concept of Abstract Words or Concepts

Cognitively speaking, Murphy (2002, as cited in Borghi & Binkofski) defined the term abstract concept as a kind of "mental glue that links our past with the current experiences in the world" (p. 1). For Barsalou, Simmons, Barbey, and Wilson (2003, as cited in Borghi & Binkofski), the term concept is considered "the cognitive side of categories" (p. 1). They added that usually abstract concepts refer to "mental states, events, conditions" (p.2). Barsalou (2003) elaborated that the criteria of abstractness depends on the degree of being detached from the physical experiences. The more for a concept to be detached from the physical world, the more abstract the concept will be. That is, not all abstract words are abstract; the whole matter depends on whether the way these words are physically or mentally conceptualized. That is, even concrete words can be referred to using abstract concepts (e.g., metaphorical) and the reverse is also possible. In this vein, Wiemer-Hastings and Xu (2005) stated that basically abstract concepts denote properties and temporal/spatial/casual relations more than events and states. However, Wiemer-Hastings et al. (2001, as cited in Borghi & Binkofski, 2014) stated that scholars also had different view on the relation between abstract and concrete words. Some see these two terms as abstract concrete dichotomy, i.e., a "bipoloar distribution" (p. 12), whereas the other see them as a continuum that ranges from being very abstract to a very concrete one.

Borghi and Binkofski (2014) added that the meaning of abstract words and concepts is "more variable and less stable" (p. 4). This is attributed to their ability to update their meanings and to be filled with new experiences. In other words, their meaning is grounded or highlighted in our sensory motor system. Aside from the grounding criterion, there is the quantification criterion. The latter entails that abstract words and concepts are difficult to be quantitatively measured. The third criterion is the one that was mentioned by Murphy and Wisniewski (1989), which is that of context. Context is considered more important when recognizing superordinate concepts, such as "musical instruments" than when recognizing basic level ones "guitar". Paivio (1986, as cited in Borghi and Binkofski, 2014) highlighted three criteria that determine whether a give word is concrete or abstract. These included the following: "imageability [arousing a mental image], context availability, and concreteness" (p. 8). However, he stated that these criteria are not always testable.

Abstract words are referred to by myriads of ways, such as: the use of words or verbal elements, or less likely through the use of "associative imagery" as Paivio (1986, p. 218) claimed; or the contextual support via prior knowledge as Schwanenflugel and Stowe (1989) said. Paivio (1986) also elaborated that abstract words or concepts are accessed verbally and conceptualized or imagined indirectly through mediation or the use of "associated concrete words". In this regard, Leek et al. (2000, as cited in Madan, 2023) mentioned that abstract words can be accessed through drawings, where the latter are memory-based and reflect perception. Such drawings as Bremner and Moore (1984, as cited in Madan, 2023) reflect people's understanding, interpretation, and conception of abstract words. Langaker (1987, as cited in Sangoor, 2023) added another mechanism that helps differentiating between concrete and abstract noun, which is that of experimental anchoring or embodiment. Psychologically speaking, Crutch and Warrington (2005) said that abstract words heavily rely on "semantic associations". Connel and Lynott (2012) pinpointed the result of a study that was conducted in 2009. The study involved a number of subjects who were asked to evaluate abstract and concrete words in terms of three variables: imageability, concreteness, and perceptual strength. Results revealed that abstract words were predicted through vision and 8% through the use of concrete words.

2.2 Visualization as a Concept

Many terms were coined by scholars to refer to the idea of thinking using pictures or the use of pictures. For instance, in (2010) Sebba (p. 73, as cited in Al-Zubaidi and Abdullah, 2018) stated that there appeared a term in sociolinguistics that combines the use of both text and image, called "linguistic landscape". It means "the visibility of languages on public and commercial signs in a given territory or region" (p. 31). This terms is highly connected to social semiotics and reflects the societal and cultural practices. A closely related term is that suggested by Bogdashina (2016). He stated that there are two terms that imply the use of an image. The first one is "spatial thinking", which refers to a person's ability to represent anything in a multidimensional way. The other term is visual thinking, which entails creating a mental image to make one's basis of understanding concrete. It is characterized by being "non-sequential", fast, and involves recalling information at a glance. Ware (2021) adopted the term "visual thinking" to refer to "a process of reasoning where external imagery is combined with mental imagery … [the latter] is used to represent alternative interpretations or possible additions to an external visualization". VanZandt (2022) also used the term "visual thinking" to pinpoint "a thought process that organizes ideas visually and focuses on graphic representation instead of a verbal representation of information". Such a mental process enhances critical thinking and reflects a person's understanding and his nuanced details from his own perspective. The resultant pictures will be a point of critical discussion through a number of open-ended questions, with no fear of providing wrong answers. Visual thinking is a method of gathering information of different perspectives, highlighting the points of similarity and difference, pinpointing the level of creativity on the participants' part, enhancing as a result ideating. He added that generally speaking, the processing mode is of two types, visual and verbal; the former is highly applicable on abstract words and the latter is said to conjure an incomprehensive picture of an object. In other words, these two modes do

not represent "a complete opposites"; instead they complete one another. MindManager Blog (2023) alternatively used the terms "visual thinking" or "picture thinking" to reflect the ability to "see words as a series of pictures…. [the ability] to transcend the limitations of linear text-based thought processes and unlock a whole new realm of creative potential… [leading] concepts to become more tangible, and connections between ideas become clearer". In an internet website called, "TOP HAT: Glossary" (2024), visual thinking was defined as "a phenomenon of cognition through visual processing… often described as seeing words as a series of pictures". It further refers to "a way for learners to externalize their internal thinking processes, making them more explicit and actionable. It can also be a way to organize thoughts and improve on critical thinking and communication skills". In another website entitled, "AlleyDog.com" (2024), it was stated that visual thinking or "non-verbal thought" means "a process of thinking and reasoning in pictures and images. It is considered an intuitive, emotional and creative mode of thought".

Speaking of the types of mental images, Dahl et. al. (2001) said that they can be of two types: imagination-based or experience-based. The former entails conjuring unseen experiences in an unexpected way, highlighting as a result one's creative thinking. The latter implies recalling unlimited past lived or heard or seen experiences. In this respect, Suwa et al. (1999, as cited in Ewenstein & Whyte, 2007) added that the highlighted images vary in terms of the amount of nuanced details mentioned. This feature by itself implies as Henderson (1999, as cited in Ewenstein & Whyte, 2007) stated that the mentally conceptualized image is subjective and culture proper. Finally, Alkins (1999, as cited in Ewenstein & Whyte, 2007) shed light on the side that visualization is not limited to the use of pictures only, but to other modes of language and representation. Colors for instance as stated by Sabat (1969, as cited Ali, 2016) are highly connected to humans' ability to recognize things; they enrich and enhance the deciphering process, and reduce any sort of vagueness one might encounter in communications.

2.3 Previously Conducted Works

This section is branched into two parts: studies on thinking in pictures, and on cognitive linguistics that involve using pictures of any type. Speaking of the first type, Qasim and Al-Bahrani (2024 under process) examined the different semantic frames highlighted on the part of the participants when hearing the concrete word APPLE. Results showed that different participants were able to highlight different aspects, mental images, and even different frame elements about the same word apple. Besides, having similar frame elements does not entail having the same highlighted meaning.

Necaise, McConnell, and Amon (2022) did a study entitled, "*The relationship between individual differences in mental imagery vividness and emotional distress"*. The objective of the study was to examine the relation between one's psychological state and the type of mental image being generated. Results showed that the human mind is biased to process happy vs. negative imageries, and that these generated imageries have an emotional influence on the generator's mind. They further stated that a person's ability to generate a vivid or sad mental imagery is bound by his mind's mindfulness trait.

Gavilan and Avello (2021) in an article entitled, "*Can a word paint a thousand pictures? Brand- evoked mental imagery in advertising"* examined the way people conjure past experiences based on the brand being stimulated by. To meet this objective, the "Dual Coding Theory" was adopted in data analysis. Results revealed that the participants were able to recall past memories using both visual and verbal codes. The same stimulus helped generating different and various mental images by different participants. Besides, different aspects were visualized or visually deteriorated and/or improved based on their familiarity with the brand stimulus.

Paivio and Simpson (1966) conducted a study entitled, "*The effect of word abstractness and pleasantness on pupil size during an imagery task".* The objective of the study was to examine the way pupil size is changed when generating a mental image of objects or things suggested by words. They further shed light on some of other researchers' results; for instance, Berrien & Huntington (1943; Lowenstein & Loewenfeld, 1962; Sokolov, 1963, as cited in Paivio and Simpson, 1966) all stated that the pupil size is influenced by psychological factors. For instance, the pupil is said to be changed depending on whether the things being visually conceptualized is pleasant and concrete. According to an earlier relevant study by Paivio (1965) and Paivio (in press), it was stated that concrete nouns help elicit images more readily than abstract nouns attributing to their associations with objective referents. The pupillary is very sensitive to word class, and so its reactions are different. Hess observed that when having a pleasant stimulus, the pupil of the eye is dilated, whereas with unpleasant, it is constricted. There are other two research's results that are worth to be mentioned. For instance, a person's pupils are widen when he attempts to link words to mental images. Besides, dilation becomes even more greater with abstract phrases than for concrete terms. However, no similar result was noticed with respect to pleasant and unpleasant words.

Speaking of the studies that were conducted within the Iraqi context on cognitive linguistics, it has been noticed the following: Al-Bahrani, Al-Saadi, and Yousif (2016) and **Al-Bahrani and Al-Azzawi (2017)** examined the participants' ability to highlight more than one deciphering to a number of selected social caricature images. Al-Bahrani and Al-Rubaye (2017) conducted a study to investigate the way cognitive linguistics as an approach can be invested in highlighting the different usages of the preposition "at" in English. Al-Bahrani (2018) investigated the concept of silence-based incongruities using the cognitive linguistic approach. Al-Fatlawi and Al-Bahrani (2019) examined the role of number and type of the figures pinpointed in accessing the intended meaning of a caricature image. Azeez and Al-Bahrani (2019) studied the visual language of satire in selected Al-Hajjar's caricature images using cognitive linguistic model. Tariq and Al-Bahrani (2019) examined the applicability of Attardo's Set-up, Incongruity, Resolution Model when dealing with unintentional humor in cognitive linguistics. Waad and Al-Bahrani (2020) examined the role of visual language in persuading tourists. Ali and Al-Bahrani (2021) examined the visual and verbal language used in facebook advertisements as a persuasive strategy. Ali and Al-Bahrani investigated the verbal and no-verbal Attention Strategies used in a selection of American English E-Advertisements. Jaber and Al-Bahrani (2021) examined the number of construal operations adopted by the participants when watching silent animated movies. Al-Jubori and Al-Bahrani (2022) did a cognitive linguistic study on the visual representation of Battered Women in a

number of Iraqi Caricatures. Kreem, Ali, and Al-Bahrani (2022) studied Blair's persuasive strategies based on his used intonational patterns. Finally, Hussien and Al-Bahrani (2023) researched the way culture is reflected using visual language.

3. Methodology of the Study

Since the present work is qualitative, then, the data will be very limited to maintain depth of analysis. Accordingly, to examine the objective of the study which entails "examining the participants' highlighted semantic range when visually conceptualizing the abstract word BLACKMAILING", the researchers are to adopt the theory of Frame Semantics by Charles Fillmore (1976/77/82). The theory implies that any sign or in terms of Fillmore Frame heard or seen can trigger a scene in one's mind. This scene consists of elements that help define that frame. A frame consists of a number of connected concepts; where each concept is a prerequisite to the understanding of the other to have a comprehensive structure or idea about the frame in question. In (1982), he elaborated that the same thing can be described using different framings or "cognitive structures" (as cited in Fillmore & Atikins, 1992, p. 75). A word may highlight a frame or part of it, and that the highlighted frame consists of a number of core and/or non-core elements. Besides, he stated that a given situation might be framed differently, reflecting consequently one's own understanding and perspective. For more illustration, consider Figure 1, which was diagramed by Qasim and Al-Bahrani (2024 under process):
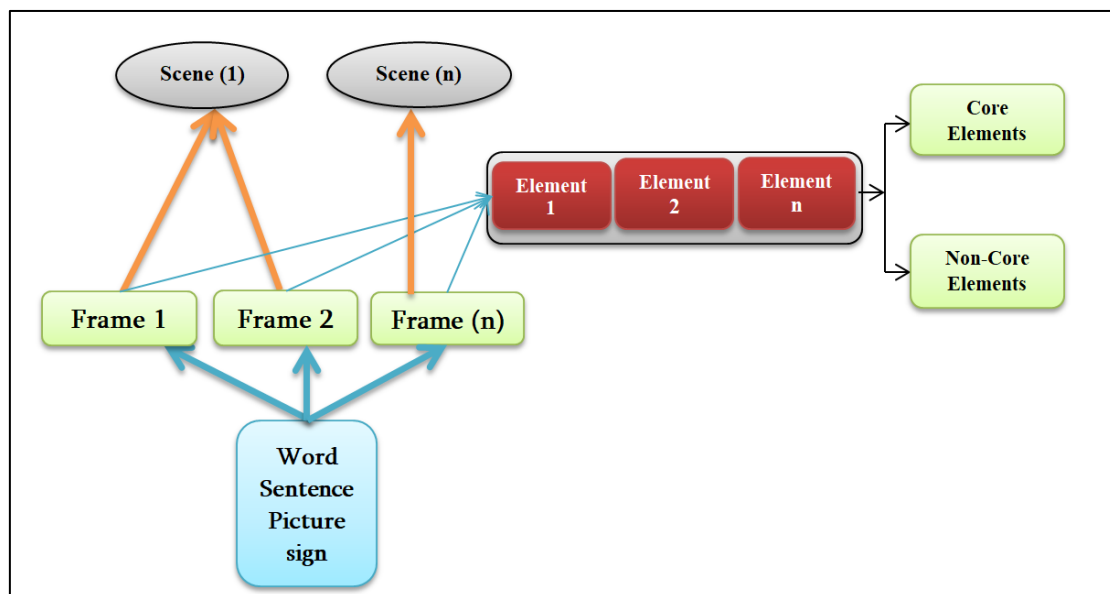

Figure 1. Fillmore's theory of Frame Semantics, as diagramed by the researchers of the present work (as cited in Qasim and Al-Bahrani, in process)

As for the data of the study, only one abstract word has been selected, which is that of BLACKMAILING. The word has been selected out of other three words based on the jury members' perspectives, maintaining as a result the face validity of the study. The word blackmailing was defined by Qalahji (as cited in Abd, 2022) as the process of taking something unwillingly from a person. Moreover, Salin bin Humaid (as cited in Abd, 2022)

maintained it means gaining benefits from someone unwillingly; otherwise, the blackmailed will be scandalized. The reason behind selecting this word is because it has become prevalent in the society specifically in this digital era as Abd (2022) stated.

The participants, who have been six in number, are talented in drawing. They have been selected from the second and fourth stages at the Department of English-College of Education for Women-University of Baghdad. These participants have been purposively selected following the ethical considerations. After clarifying what is required from them, they have been asked to draw on a paper whatever comes to their mind once they hear the word BLACKMAILING. The whole test has been done at the Department of English in a specific closed room where confidentiality has been maintained and everything has been controlled. After finishing with the step of drawing, the researchers have collected their answers / drawings and examined them. They have then been assigned another day to do the interview to answer some of the queries highlighted by the researchers. As for the procedures followed in data analysis, they include the following:

1. examining the various possible frames, frames elements and scenes highlighted by the participants on [BLACKMAILING], and

2. Investigating the points of similarity and difference among the participants' answers.

3.1 Data Analysis

Speaking of the scenes highlighted by the talented participants upon hearing the word BLACKMAILING, they can be represented in the following drawings:

Participant's 1 Drawing of Blackmailing

Here participant one (hence P1) has framed BLACKMAILING in the form of two persons; the first one is carrying something heavy, who metaphorically represents the devil as metonymically indicated by the two horns. This person is asking someone else to carry something. The second person, who is being asked, is tied and his mouth is taped, meaning that he can do nothing. Consequently, the frame of [BLACKMAILING] for P1 includes the following elements: {a person with horns, tied man, heavy things, script, broken heart, and the black, red, and brown colors}.

Based on P1's answers to the set of questions prepared by the researchers after examining her drawing, it has been noticed that blackmailing has been mentally conceptualized in the form of two characters: an evil and a victim. The evil character

blackmails the victim by asking him to carry some luggage while he is being tied up. The latter cannot express or do anything, as his mouth is taped.

The painter has stated that such a thing can exist between any two persons of different class or authority levels. Here, the one who has a higher authority is depicted as being a wicked person. He can be a manager, a boss, etc., who usually exploits his employees by asking them to do something that they cannot do. He does not even give them the chance to express their conditions. Thus, P1 has used metonymy when she has depicted the evil man with two horns. The two men further metonymically refer to any two persons with a different authority or ranking, class, etc. The act of carrying can even metaphorically mean anything the authority or powerful man requests from the other one who is inferior to him in one way or another. There is a sort of power unbalance between the two extremes. There is also a symbol of a broken heart, connoting that he is hurt, or he is asked to do something that is impossible for him to do. Having his mouth taped and his body being tied up entails that he is stripped off his right and that he is helpless.
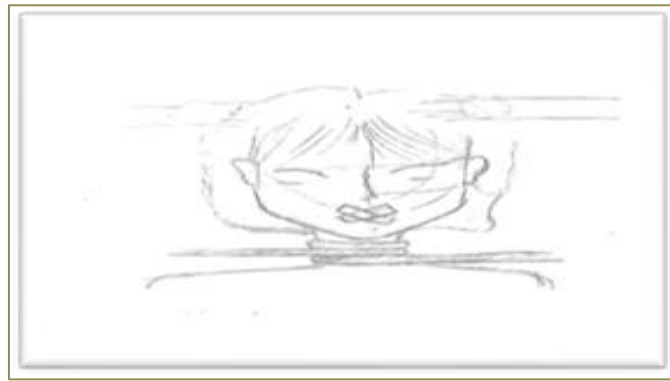

Participant's 2 Drawing of Blackmailing

Here P2, has mentally framed the word BLACKMAILING in terms of a computer with a hand coming out of the screen. There is also another hand that is coming from the outside environment handing a big amount of money. This frame or cognitive structure highlight the scene of a bribery process done through a screen. Accordingly, the frame elements of [BLACKMAILING] include the following: {a hand giving money, a hand taking money, a screen, the phrase Be quiet please, 1000,000 $}.

Based on P2's clarifications, there are two persons; the first one gives 1000,000$ to the second in order to buy his silence, as is verbally coded by the utterance "Be quiet please!". The painter here wants to say that people are no longer paying attention to the moral deeds that are required in the society. Quietness is a moral deed and people are not supposed to pay to gain it. However, such a thing happens every day and in many places.

The screen metonymically means virtual blackmailing; the two hands metonymically refer to two persons; one is the blackmailer and the other is the blackmailed. She further wants to say that the process of blackmailing mostly occurs secretly or under suspicion as the blackmailers do not prefer to be known. Basically, the process of blackmailing is done for the sake of gaining money, or sometimes of gaining something of value.

Participant's 3 Drawing of Blackmailing

As for P3, she has framed or cognitively structured BLACKMAILING in the form of a woman, having her mouth taped, and her neck hanged by a rope, with two opposite hands. That is, blackmailing for her is to force the person towards doing or saying something unwillingly. In other words, the latter is helpless and is susceptible to death or a scandal if he has not been abided by the blackmailer's orders. Accordingly, the frame of [BLACKMAILING] for P3 involves the following elements: {face of a woman, two hands, tape, and a rope round the neck}.

Based on her submitted answers, it has been noticed that for P3 to blackmail someone means to ask a person to say something he does not want to say, or to do something, one does not want to do. That is why, the woman's mouth is taped in order not for the blackmailer to hear what she is saying and not for her to say anything. That is, the sign of a tape metonymically means silence, not being allowed to speak, etc. These two hands metonymically mean the blackmailer's attempt to change or manipulate the victim's mind.
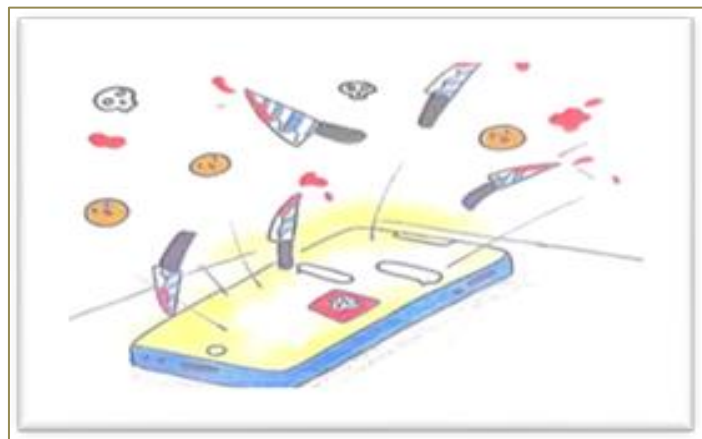
Participant's 4 Drawing of Blackmailing

As for P4, she has mentally conceptualized BLACKMAILING in the form of a mobile device from which there are knives, shocked faces, sheds of blood and skulls coming out. That is, the scene of virtual blackmailing is highlighted here. Thus, the frame elements of [BLACKMAILING] include the following: {mobile phone, chat screen, knives, sheds of blood, skulls, smiley faces, shocking faces, lines of shouting, colors, and the orientation and number of the knives}.

The screen of chatting metonymically means that there is a sort of virtual blackmailing. The painter has further illustrated that in these days, mobile phones and social media are one of the most common ways of blackmailing, as it is an easy and quick method. It does not require money or effort because all the matter starts and ends in chats and calls. The painter has screaming faces, which metonymically connote that the speech or the relationship between the two persons is problematic, and so will end in blackmailing. The number of the knives and their direction metaphorically entail that the amount of threat coming out from the blackmailer is higher than that of the blackmailed one. This idea is metonymically supported by the blood sheds, the strokes of shouting that come out of the phone, the shocked faces, and the skulls. Moreover, skulls may metaphorically connote dangerous people who blackmail others via mobile phones. This further entails that blackmailing might lead to death if the blackmailed refused to respond to the blackmailer's demands. Even the knives connote that the speech has become intense and dangerous. Speaking of the colors, the painter has decided to choose prominent and contrastive colors to make her idea stronger and more obvious.

Participant's 5 Drawing of Blackmailing

It seems that P5 has mentally visualized BLACKMAILING in terms of a male human devil, who is forcing a woman to do something she does not like to do. Accordingly the frame elements of [BLACKMAILING] include the following: {animal person, a kneeling, crying woman, paper, tail, a hole in the ground, gesture, and colors}.

The two horns and the tail here metonymically recall the idea of an animal, and metaphorically assimilate this man to an animal or a devil in his behavior. The devil is carrying a mobile, which metonymically means it is also a sort of virtual blackmailing. He is smiling, which means he is enjoying his illegal act. She is, on the other hand, crying, and sitting helpless not knowing what to do.

Based on P5's answers, it has been shown that blackmailing has been visually conceptualized with people's personal affairs. It can exist when someone tries to expose some personal details of others; an action which might include conditions to be done. The one who blackmails might ask the blackmailed to do something in order not to expose what he knows about the second person. It might also be concerned with issues regarding: money, reputation, secrets, etc. The black area is a hole. Literally, it means asking the victim to fall herself to the hole; otherwise, he will publish her photos or secrets.However, metaphorically speaking, the black hole might mean any disaster or bad thing she might be forced to do to satisfy the blackmailer. The paper in the man's hand metonymically means some secret issues or photos, etc. It can also metaphorically speaking highlight any other thing.

Participant's 6 Drawing of Blackmailing

Here, it seems that P6 has visually conceptualized BLACKMAILING in terms of a woman being tied by a rope, and her mouth being zipped. There is a man behind her carrying a mobile and is showing her a phone conversation. The screen has been given a bigger size as a means of emphasizing the size of thereat. Thus the frame elements of [BLACKMAILING] to P6 are: {a man with horns, tied up and zipped mouth woman, mobile, and mobile chat}.

Based on P6's answers, it has been shown that blackmailing has been cognitively structured as a wicked man who has caught a mobile phone of a woman and started threating her with the chats he found in it. Again, the mobile metonymically refers to virtual blackmailing. The two horns metonymically recall the idea of a devil, and metaphorically connote that the man is like an animal in his behavior. There is a wicked smile on the man's face, which metonymically means the matter is serious and dangers and the chance to manipulate and threaten her is great. The big size of the mobile screen metaphorically entails that the issue is serious and big. The woman appears with a zipped mouth and tied up hands to metaphorically mean she can say or do nothing, and that she is in a big problem. Why the one being blackmailed is a woman is because women usually are targeted by such trivial and evil men, who exploit the weakness of their characters and their fear of getting bad reputation.

4. Conclusions

As far as the research question, which reads, "**What is the semantic range of the selected abstract word (blackmailing) from the participants' perspectives who are talented in drawing?**", it has been observed the following:

1. There is no fixed referential connection between an abstract word and its concept. Each participant has assigned a particular referent to it, emphasizing her micro-culture details. This is somehow in line with Paivio (1986) when stated that abstract words have "a weak connection to the "imagen system". However, since the participants are talented in drawing, they have not resorted to the verbal as Paivio stated, preferring instead to conjure an experienced- based picture of the word.

2. Besides, to depict the abstract noun as blackmailing, the participants have used concrete referents and associations; a conclusion that is also in line with Paivio (1986).

3. Both Paivio (1978) and Phifer (2008) agreed to the importance of using pictures in anchoring the meaning of abstract words. Here, in this work, the researchers have not used pictures, instead, the participants anchored their understanding of abstract nouns in pictures. This is mainly because they are talented in drawing. The use of verbal language is confined to the areas of clarification and specification.

4. The images drawn by the participants reflect as Barsalou, Simmons, Barbey, and Wilson (2003, as cited in Borghi & Binkofski) stated "mental states, events, conditions" (p.2). These images represent a minimized picture of reality in form of an event or a scene.

5. Due to their concrete referential pictures, the abstract nouns have been turned to a sort of concrete nouns. This conclusion is in line with Barsalou (2003), who mentioned that the degree of abstractness depends on the level of being detached from the reality.

6. Examining the number of elements in each of the highlighted frames, one could see that some of the elements as horns, woman, man, mobile, tying, and hand do exist in some frames; however, their employment is different. The number of these elements range from a minimum of 4 element to a maximum of 10 elements, as shown in Figure 2:

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1. P1: {a person with horns, tied man, heavy things, script, broken heart, and the black and brown colors}.

2. P2: {a hand giving money, a hand taking money, a screen, the phrase *Be quiet please*, 1000,000 $}.

3. P3: {face of a woman, two hands, tape, and a rope round the neck}.

4. P4: {mobile phone, chat screen, knives, sheds of blood, skulls, smiley faces, shocking faces, lines of shouting, colors, and the orientation and number of the knives}

5. P5: {animal person, a kneeling, crying woman, paper, tail, a hole in the ground, gesture, and colors}.

6. P6: {a man with horns, tied up and zipped mouth woman, mobile, and mobile chat}.

Figure 2. The frame elements as highlighted by the six participants

7. Besides, the range is not fixed and is changeable, reflecting one's personal understanding and experience in the physical world. This conclusion also agrees with that of Borghi and Binkofski (2014), who claimed that the meaning of words and concepts is "more variable and less stable" (p. 4).

8. The word blackmailing has launched a number of mental scenes, or sometimes part of the scenes, or part of the elements with various ranges of elaborations and details. Such scenes are experience-based, as they reflect the participants' knowledge and perspectives about the physical world. To illustrate more, consider the following points:

• The sense of forcing someone to do something is there in all the images. However, the presentations or mental images highlighted differ, exemplifying as a result their experiences in the world.

• The idea of drawing someone being tied by a rope is repeated across P1, P3, and P6. However, P1 has conceptualized a man being tied, whereas the other have conceptualized a woman being tied.

- P2, P4, P5 and P6 have focused on the virtual blackmailing. For instance, P2 has used the computer, whereas the other three used a mobile. However, P5 has made the threat general, via referring to a chat or a photo, etc. That is, the details have varied across them.
- The idea of blackmailing has focused majorly on woman, as in the drawings 3, 5 and 6, and one image has focused on the man as being blackmailed by another. Besides, two images have depicted the sense of blackmailing in a general way without confining it to women or men only.
- The use of scripts or verbal language has been invested in two images only.
- The painters have majorly used metonymy, and metaphor, in addition to slight symbolic references.
- Basically, the sources of their ideas have been taken from the news they have heard, things they have seen, stories they have read, etc. That is, majorly, the stories are realistic ones or as Dahl et. al. (2001) stated experience-based.
- Colors have played a role only in drawing of P4.
- The idea of a man in the form of a devil has been repeated three times by three different painters.
- As one can see, the same word BLACKMAILING has been construed differently by different painters. Despite the common things one might encounter in them, still there are other points of difference and emphasis highlighted on their parts.

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